

Appendix C

Correlated PM₁₀ Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds¹ and PM₁₀ concentrations at select monitoring sites within the Salton Sea Air Basin on November 25, 2015. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

IMPERIAL COUNTY SELECT SITES (FIGURES C-1 to C-4)

**FIGURE C-1
BRAWLEY
PM₁₀ CONCENTRATION & WIND SPEED CORRELATION**

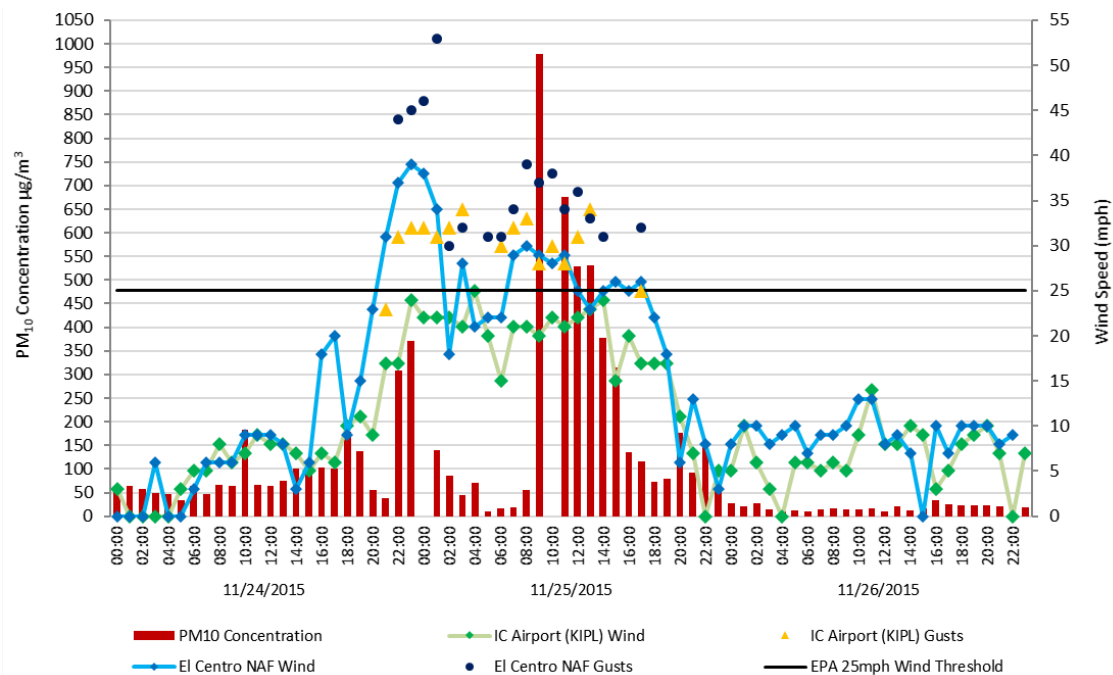


Fig C-1: Brawley hourly concentrations spiked late on November 24, 2015 in response to increasing winds that blew through November 25, 2015. Air quality data is from the EPA's AQS data bank. Wind data from the NCEI's QCLCD system

¹ National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); <https://w1.weather.gov/glossary/index.php?letter=w>

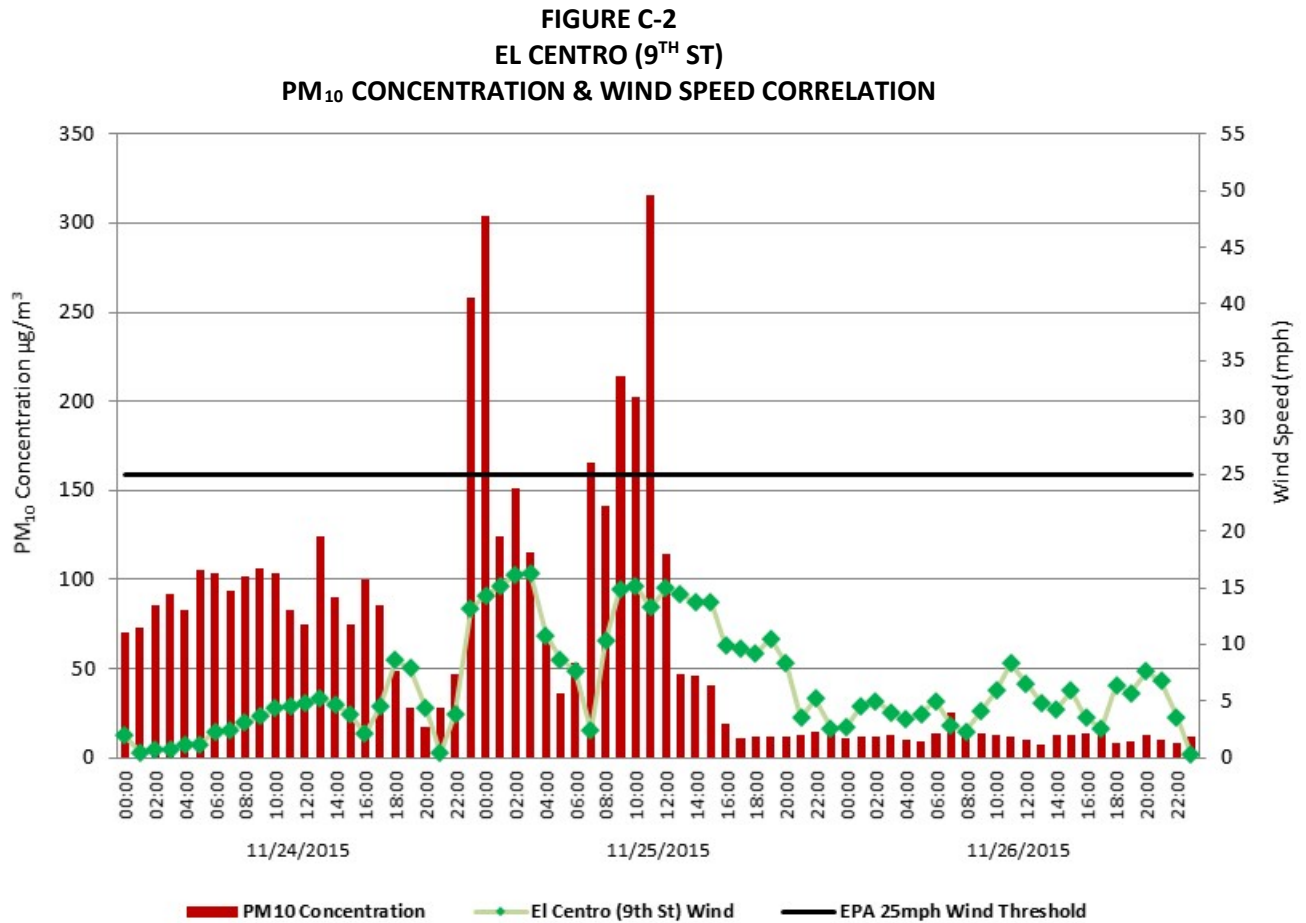


Fig C-2: El Centro saw a spike in concentrations on November 25, 2015, but not as great as at Brawley or Niland. Air quality and wind data is from the EPA's AQS data bank

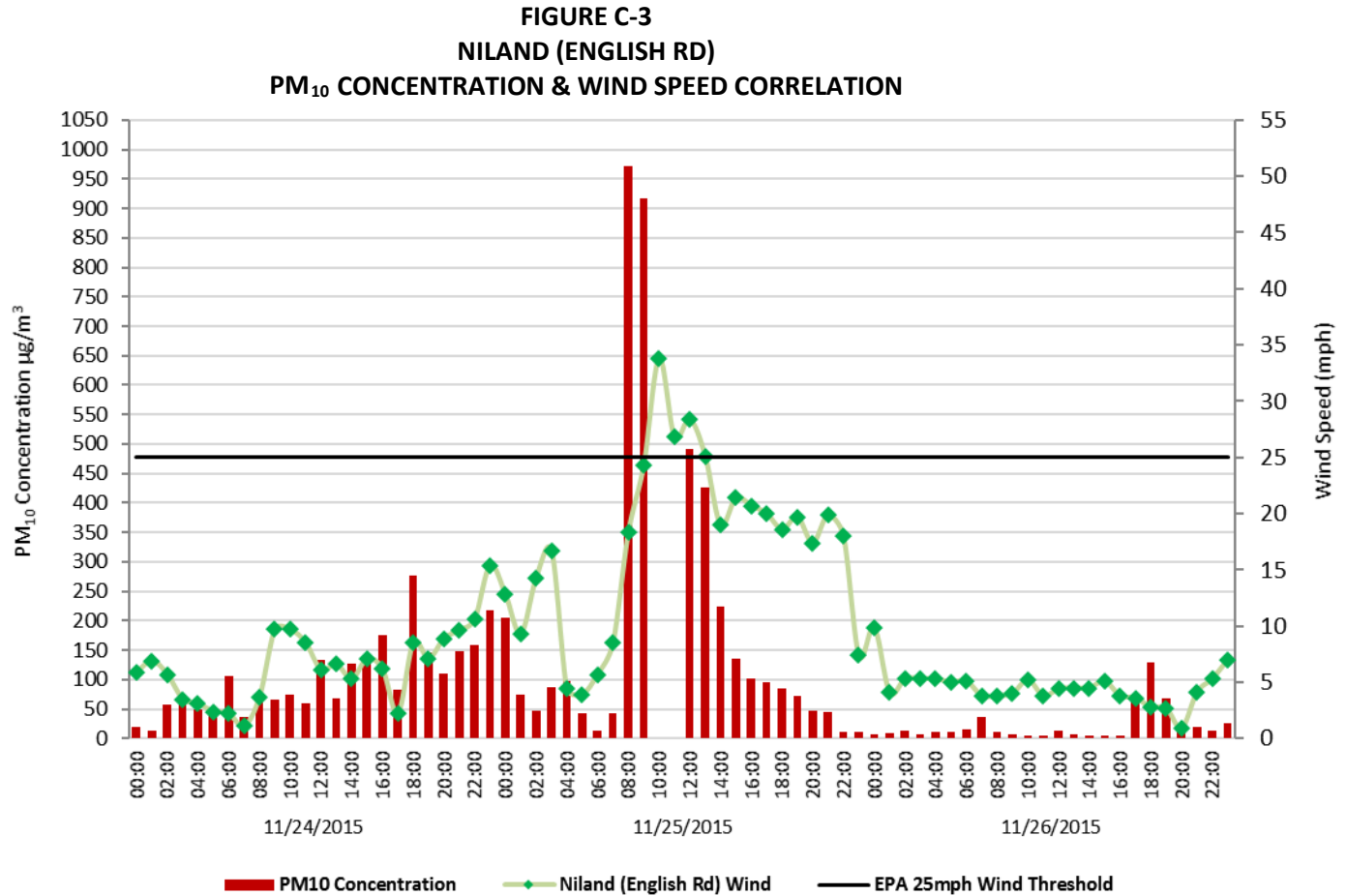


Fig C-3: Niland saw a spike in hourly concentrations as winds at the station rose on November 25, 2015. Air quality and wind data is from the EPA's AQS data bank

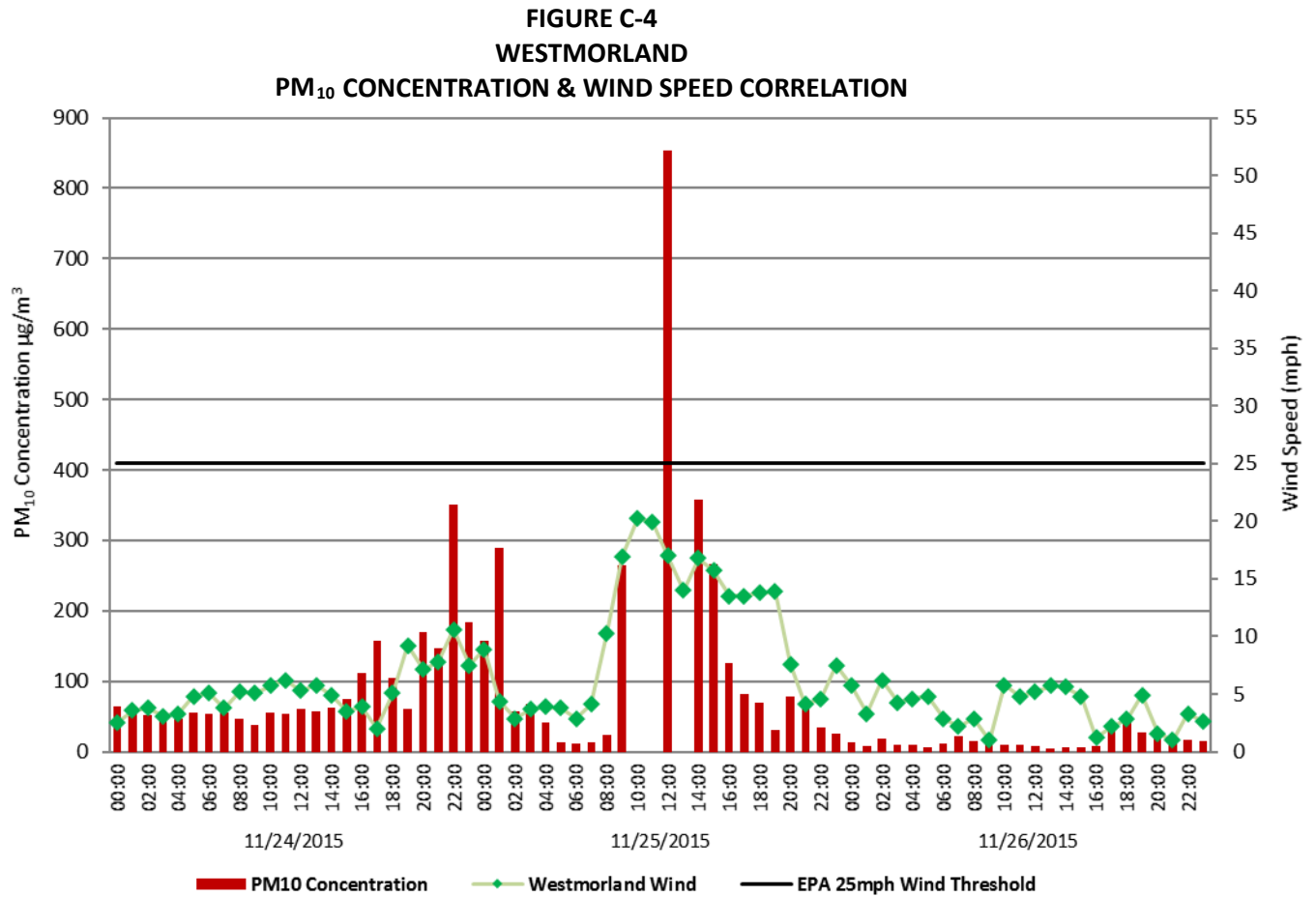


Fig C-4: If not for the three hours of absent data during critical hours, Westmorland likely would have recorded an exceedance. Air quality and wind data is from the EPA's AQS data bank

EASTERN RIVERSIDE COUNTY MONITORING SITES

FIGURE C-5
INDIO (JACKSON ST)

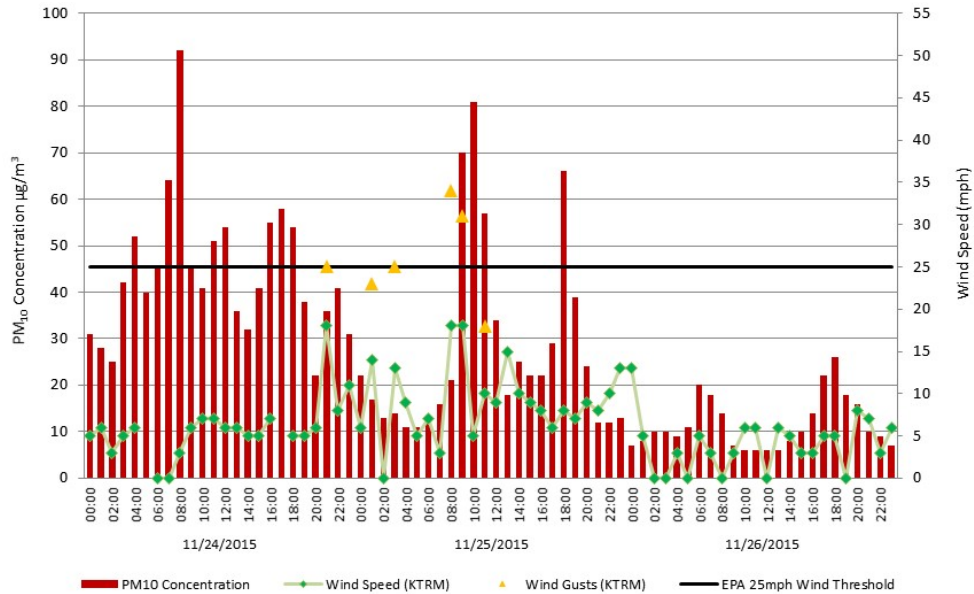
PM₁₀ CONCENTRATION & WIND SPEED CORRELATION

Fig C-5: Indio (Jackson St) data from Jacqueline Cochran Airport (KTRM) and the NCEI's QCLCD system

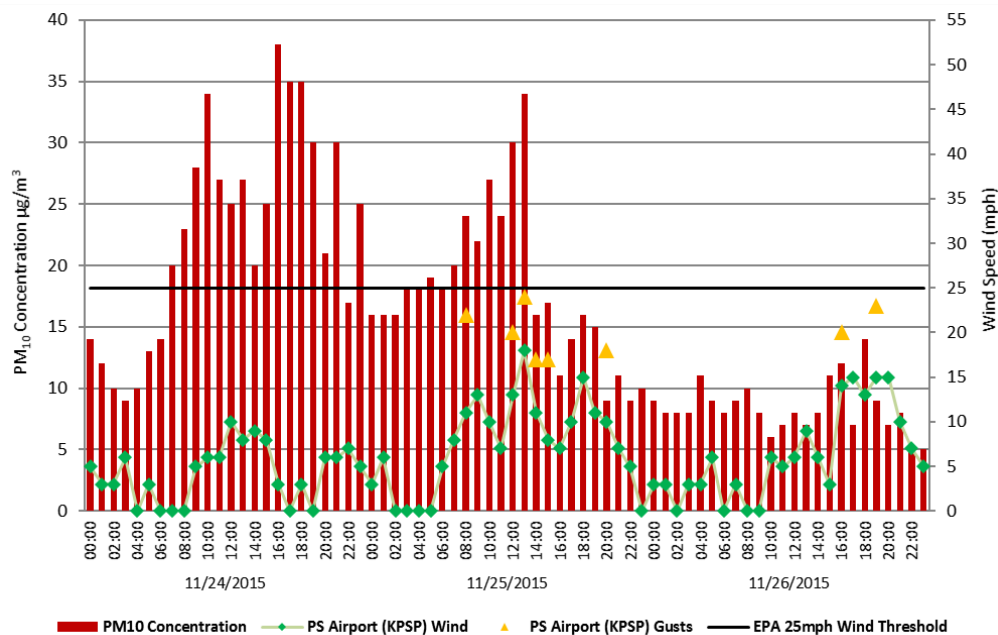
FIGURE C-6**PALM SPRINGS FIRE STATION****PM₁₀ CONCENTRATION & WIND SPEED CORRELATION**

Fig C-6: Palm Springs wind data from Palm Springs Airport (KPSP) and the NCEI's QCLCD system

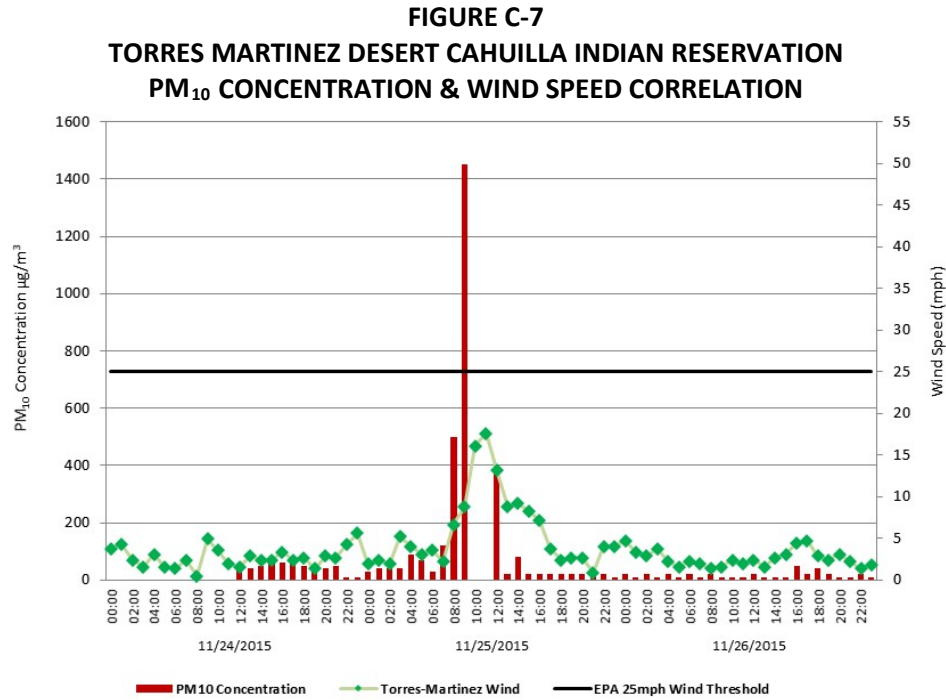


Fig C-7: Torres-Martinez Tribal had a brief spike of concentrations on November 25, 2015. Air quality and wind data is from the EPA's AQS data bank

YUMA, ARIZONA MONITORING SITE

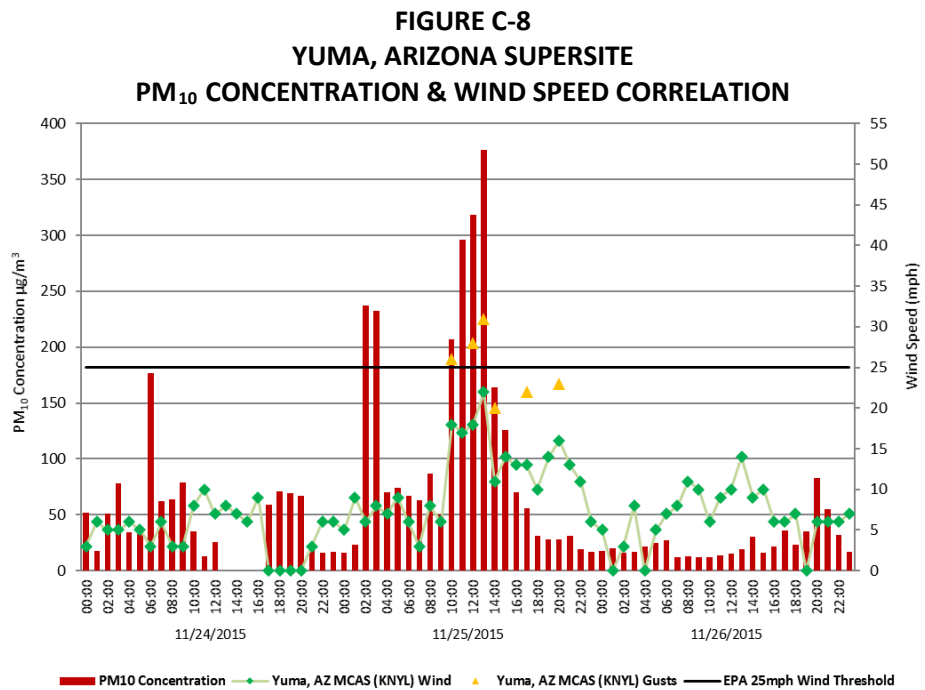


Fig C-8: Yuma Supersite wind data from Yuma MCAS (KNYL) and the NCEI's QCLCD system